## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INQUIRY INTO UNIVERSAL SERVICE AND FUNDING ISSUES

ADMINISTRATIVE CASE NO. 360

## ORDER

IT IS ORDERED that BellSouth Telecommunications, Inc. ("BellSouth"), MCI Telecommunications Corporation Southeast Division ("MCI"), GTE South, Inc. ("GTE"), Cincinnati Bell Telephone Company ("CBT") and AT&T Telecommunications of the South Central States, Inc. ("AT&T") shall file the original and 12 copies of the following information with the Commission with a copy to all parties of record no later than January 23, 1998. The name of the witness who will be available to respond to questions concerning each item of information requested should a public hearing be scheduled shall be furnished with each response.

- 1. With respect to loop design, there appears to be fundamental differences in the approaches taken by BCPM and Hatfield model developers. The BCPM employs a dynamic grid approach to locating rural customers, while the Hatfield model uses a town clustering approach. Total loop miles do not differ greatly, but there are large differences in distribution, feeder and sub-feeder cable miles between the two models.
- a. Explain why it is or is not important to locate rural customers more accurately.

- b. Explain all differences in assumptions between the respective models that lead to different distribution, feeder and sub-feeder cable mile estimations.
- c. At the formal conference and at the hearing concerning a now superseded Hatfield model, supporters of the BCPM claimed that the Hatfield model was not based upon sound engineering practices per Bellcore network design and construction criteria, which, in part, account for differences in distribution, feeder, and sub-feeder cable miles. In the opinion of those originally voicing this criticism, is this still the case? Explain.
- d. Hatfield supporters have responded to the allegations of using unsound engineering principles in part by saying that the most recent Bellcore engineering practice guidelines support their assumptions. In the opinion of those voicing this opinion, is this still the case? Provide documentation which supports the Hatfield assumptions which drive the resulting makeup of distribution, feeder and subfeeder cable miles in Hatfield 4.0 and 5.0. If the Hatfield model engineering assumptions driving this part of the model are based in part on actual field engineering experience, then also provide a written engineering explanation which demonstrates or explains why the BCPM supporter's criticisms are invalid.
- 2. The developers of the Hatfield model have maintained that their model is not intended to be used for the construction of a local network. Rather, the Hatfield model is only supposed to estimate the investment necessary to construct a hypothetical network. Is this still correct? Explain.

- 3. Can the statement in question 2 be made in regard to the BCPM model? Explain.
- 4. Discuss the following statement in regard to the most recent BCPM and Hatfield models. Both the BCPM and the Hatfield models are intended to design hypothetical local networks which are nevertheless related to a particular LEC's inground physical network in that these models place central offices in their actual locations and account for actual numbers of access lines served by actual central offices. If this statement is not correct then explain in detail why. Be sure to include in your explanation a copy of the FCC guidelines which specify how closely the hypothetical network design calculated by the model you espouse should mirror the actual in-ground network, especially with respect to loop and central office design.
- 5. BellSouth shall provide an analysis of Hatfield 5.0 in a manner similar to that performed by the Georgetown Group on Hatfield 4.0.
- 6. AT&T and MCI shall provide an analysis of BCPM 3.0 in a manner similar to the Georgetown Group's analysis of Hatfield 4.0, including a discussion regarding whether, if the Commission chose the BCPM 3.0 for USF purposes, the recommended values for each of the variables and the resulting USF cost estimates.
- 7. BellSouth, GTE and CBT shall provide the average revenue per residential account, average revenue per residential access line, and average revenue per business account and average revenue per business access line for each of their respective wirecenters. In addition, these parties shall provide a detailed description of the formulas

used in the calculations, including an itemized list of any monies subtracted from relevant gross revenue figures. This response should be provided on diskette.

Done at Frankfort, Kentucky, this 9th day of January, 1998.

**PUBLIC SERVICE COMMISSION** 

For the Commission

ATTEST.

Executive Director